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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Michelle A.J. PALMER, et al. ART UNIT: 1646

SERIAL NO.: 09/759,152 EXAMINER: John D. Ulm

FILING DATE: January 16, 2001

FOR: SYSTEMS FOR SENSITIVE DETECTION OF G-PROTEIN COUPLED

RECEPTOR AND ORPHAN RECEPTOR FUNCTION USING REPORTER

ENZYME MUTANT COMPLEMENTATION

AMENDMENT

RECEIVED

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

APR 0 1 2003

SIR:

TECH CENTER 1600/2900

Responsive to the outstanding Office Action dated November 29, 2002, entry of the following amendments is respectfully requested.

IN THE CLAIMS

Please amend the claims as follows:

- 1. (Twice Amended) A method of assessing the effect of a test condition on G-protein-coupled receptor (GPCR) pathway activity, comprising:
- a) providing a cell that expresses a GPCR as a fusion protein to a first mutant form of a reporter enzyme and an arrestin as a fusion protein to a second mutant form of the reporter enzyme complementary to the first mutant form of the reporter enzyme,

wherein the arrestin is modified to enhance binding of said arrestin to the GPCR, wherein said enhanced binding between said arrestin and the GPCR increases sensitivity of detection of said effect of the test condition;

b) exposing the cell to a ligand for said GPCR under the test condition; and 03/31/2003 CNGUYEN 00000015 09759152

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